BRUHAT BANGALORE MAHANAGARA PALIKE
YELAHANKA ZONE

Name of the work: **Construction of BS slab drain and Improvements to roads in Kuvempunagara 1st stage Rajakaluve beside roads in Ward No. 11, Vidyaranyapura Sub Division.**

Estimate Cost: 1000000.00

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
1	KSRRB 300-1.1 : Earthwork excavation by manual means in Hard soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. Specification No. KRBS 300-1 MORT & H Specification No. 301 to 305 (P.149/I.19.1) PWD SR 2011-12	Cum							
	SSM Drain		1	40.00	1.80	1.05	75.60		
	BS Slab Drain		2	110.00	0.60	0.60	79.20		
	Culvert		2	3.00	1.80	1.05	11.34		
	For Road Work		1	110.00	4.00	0.20	88.00		
							254.14	**62.86**	**15974.00**
	Basic Rate	58.20							
	Area Weightage @8%	4.66							
	Total	**62.86**							
2	Providing **7.5 cms thick** granite slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., complete (P.28/I.5.31.1 PWD SR - 2011-12)	Sqm							
			2	110.00		1.35	297.00		
							297.00	331.52	**98460.00**
	Basic Rate	303.00							
	Add Differnce in Cost of Cement 0.132 x 30.00 =	3.96							
		306.96							
	Area Weightage @ 8%	24.56							
	Total	**331.52**							
3	KSRB 4-1.3 : Providing and laying in position **plain cement concrete of mix M7.5 with OPC cement @ 180 Kgs** using 40mm and down size graded granite metal, corse aggregates @ 0.85 cum and fine aggregtes @ 0.58cum machine mixed, concrete laid in layers not exceeding 15 cms thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2 (P.12/I.4.3 PWD SR - 2011-12)	Cum							
	SSM Drain		1	40.00	1.80	0.15	10.80		
	Culvert Bagaraiah House Road		1	3.00	1.80	0.15	0.81		
							11.61	3939.41	**45737.00**
	Basic Rate	3647.60							
	Area Weightage @ 8%	291.81							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
	Total	**3939.41**							
4	KSRB 5.2-3 : Providing and constructing granite / trap / basalt size stone masonry in **foundation cement mortar 1:6**, stone hammered dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specification. KBS 5.1.13 (P.25/I.5.6 PWD SR - 2011-12)	Cum							
	SSM Drain		2x1	40.00	0.60	0.45	21.60		
			2x1	40.00	0.45	0.45	16.20		
	Culvert		2x2	3.00	0.60	0.80	5.76		
							43.56	2818.80	**122787.00**
	Basic Rate	2568.00	2618.40					2827.87	123182.00
	Add Differnce in Cost of Cement 1.40x30.00 =	42.00							
		2610.00							
	Area Weightage @ 8%	208.80	209.47						
	Total	**2818.80**	2827.87						
5	KSRB 4-1.6 : Providing and laying in position plain cement concrete of **mix M15 with cement @ 240 kgs with 20mm** and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification. No. KBS 4.1,4.2. **No. 12/ Item No. 4.6/ PWD SR 2011-12**	Cum							
	SSM Drain		2x1	40.00	0.45	0.10	3.60		
	Culvert		2x2	3.00	0.60	0.10	0.72		
							4.32	4462.34	**19277.00**
	Basic Rate	4131.80							
	Area Weightage @ 8%	330.54							
	Total	**4462.34**							
6	KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with **cement mortar 1:3,** 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. (P.119 / I.15.1 PWD SR - 2011-12)	Sqm							
			2x1	40.00		0.80	64.00		
			2x2	3.00		0.80	4.80		
		70.22					**68.80**	75.71	**5209.00**
	Basic Rate	69.50	~~70.22~~					75.84	5218.00
	Add Differnce in Cost of Cement 0.02x30.00 =	0.60							
		70.10							
	Area Weightage @ 8%	5.61							
	Total	**75.71**	75.84						

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
7	KSRB 4-6.4: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (P.17 / I.4.31 PWD SR - 2011-12)	Sqm							
	SSM Drain Covering Slab		1	40.00		0.60	24.00		
	Culvert		2x5	4.80		0.23	11.04		
			2x5	1.80		0.60	10.80		
							45.84	221.40	**10149.00**
	Basic Rate	205.00							
	Area Weightage @ 8%	16.40							
	Total	**221.40**							
8	KSRB 4.2.2 : Providing and laying in position **reinforced cement concrete of design mix M20 with OPC cement @ 320 Kgs with 20mm** and down size graded granite metal coarse aggregates @ 0.878cum and fine aggregates @ 0.459 cum wuth superplastisier @ 3lts confirming to IS 9103-1999 reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, return walls, wall (any thickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.6 **(P.13/I.4.11 PWD SR - 2011-12)**	Cum							
	SSM Drain Covering Slab		1	40.00	1.50	0.20	12.00		
			2x5	1.80	0.60	0.23	2.48		76697.00
							14.48	5296.75	**76718.00**
	Basic Rate	4904.40							
	Area Weightage @ 8%	392.35							
	Total	**5296.75**							
9	KSRB 4.9.2:providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost pf materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 **Page No. 19/ Item No. 4.46/ PWD SR 2011-12**	Qntl							
	Consider 90 KG / Cum		0.90	14.48			13.04		95816.00
							13.04	7347.82	**95783.00**
	Basic Rate	6803.54							
	Area Weightage 8%	544.28							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
	Total	**7347.82**							
10	KSRRB M300-53. Construction of embankment with approved materials Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications. which includes cost of gravel / Murrum, watering charges & compaction by vibratory roller) **PWD SR 2011-2012 Bangalore circle Pg No. 156, I No. 19.60**	Cum							
			1	110.00	4.00	0.25	110.00		
			1	134.00	7.00	0.25	234.50		
							344.50	146.88	**50600.00**
	Basic Rate	136.00							
	Area Weightage @8%	10.88							
	Total	**146.88**							
11	KSRRB M400-14.2: Providing, laying, spreading and compacting stone aggregates of specific size to water bound macadam specifications. Including spreading in uniform thickness, hand packing, rolling with 3-whelled steel / vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type of screening / binding materials to fill up the interstices of coarse aggregates, watering and compacting to the required density complete as per specifications. B by mechanical meansCrushable type **such as moorum or gravel for grading II , No. 166/ Item No. 20.15.2/ PWD SR 2011-12**	Cum							
			1	110.00	4.00	0.10	44.00		
							44.00	1072.44	**47187.00**
	Basic Rate	993.00							
	Area Weightage @ 8%	79.44							
	Total	**1072.44**							
12	KSRRB M400-14.2: Providing, laying, spreading and compacting stone aggregates of specific size to water bound macadam specifications. Including spreading in uniform thickness, hand packing, rolling with 3-whelled steel / vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type of screening / binding materials to fill up the interstices of coarse aggregates, watering and compacting to the required density complete as per specifications. B by mechanical means Crushable type **such as moorum or gravel for grading III, No. 166/ Item No. 20.15.4/ PWD SR 2011-12**	Cum							
			1	110.00	4.00	0.075	33.00		
							33.00	1170.72	**38634.00**
	Basic Rate	1084.00							
	Area Weightage @ 8%	86.72							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
	Total	**1170.72**							
13	Providing, laying, spreading and compacting graded stone aggregate to **wet mix macadam** specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications **(P.166/I.20.18) PWD SR - 2011-12.**	Cum							
			1	118.00	7.00	0.15	123.90		
							123.90	1060.56	**131403.00**
	Basic Rate	982.00							
	Area Weightage @ 8%	78.56							
	Total	**1060.56**							
14	KSRRB 500-1.1 : Cleaning the existing WBM road surface including removing of binding materials and other foreign matter with wire bushes and small picks, sweeping with brooms or soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries, curing complete as per specifications. Specification No. 500-1.3 **(P.171/I.21.1) PWDSR 2011-12**	Sqm							
			1	118.00	7.00		826.00		8293.00
							826.00	10.04	**8296.00**
	Basic Rate	9.30							
	Area Weightage @ 8%	0.74							
	Total	**10.04**							
15	KSRRB M500-6: Providing and applying primer coat with bitumen emulsion on prepared surface of granular base including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. MORTH specification NO. 502, **Page No. 171/ Item No. 21.6/ PWD SR 20011-12**	Sqm							
			1	118.00	7.00		826.00		33527.00
							826.00	40.59	**33524.00**
	Basic Rate	37.58							
	Area Weightage @ 8%	3.01							
	Total	**40.59**							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
	KSRRB M500-18: Providing and laying **semi dense bituminous concrete** 25mm thick with 100-120 TPH batch type HMP producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder at 4.5 to 5% of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem roller to achieve the desired compaction as per MORTH specifications clause No. 500.8 complete in all respects as per specifications. **With 80/100 grade bitumen, No. 151/ Item No. 21.20.1/ PWD SR 2011-12**	Cum	1	134.00	7.00	0.025	23.45	7866.72	184475.00
	Basic Rate 7284.00 Area Weightage @ 8% 582.72 **Total 7866.72**								
17	Lead for Disposal of Debris shall be payable at carriage rates by Mechanical means inlcuding loading and unloading. From 0.00 to 2.00 Km (Page No.123)	Cum					216.02	80.14	17311.00
	Average weight of earth 1.28 tonne / kg for 5X1.20X2.00=12.00						12.00	4.80	
	Add loading and unloading Vide item no.17.1 P.no.141						62.20		
							74.20		
	Area Weightage @ 8%						5.94		
	Total						80.14		
18	Miscellaneous and other Charges	L/S							1229.00
								Total	**1000000.00**

(Rs. Ten Lakhs Only)

PROPOSED SANCTIONED FOR Rs. 10,00,000=00
Rupees Ten lakhs only
Under P1771 POW 11-12
Registered as EE(Y) No. 254 12-13
Subject to conditions contained in enclosed memo EE(Y) No. 254 /12-13
Dt. 14-05-12 Estimate A/Sanctioned
JC/Y.d./AA/12-13 No. 254
dated 14-05-12

Technical Sanction Rs. 10,00,000=00
Ten lakhs
Under P-1771 POW 11-12
registered as EE No: 162 / 12-13 Dr. 15-5-12 Subject to conditions contained enclosed memo.
EE (BTP. Div.)

CERTIFICATE:

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per P.W.D.S.R of 2011-12.
3 This work included under POW 2011-12.
4 The provisions were made in this estimate are necessary and adequate.
5 This works come under B.B.M.P limits.

Assistant Engineer

Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Vidyaranyapura Sub Division

Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division